ABSTRACT OF THE DISCLOSURE

A system and corresponding method for utilizing Code Division Multiple Access (CDMA) techniques in compressed modes. In certain embodiments, radio frames on an uplink data channel are formed and transmitted to include at least one transmission gap (TG) therein in a compressed mode. This may be achieved by reducing the spreading factor (e.g., by a factor of two). In combination with reducing the spreading factor, the TG may be tailored or adjusted to its desired length (TGL) by using bit repetition (or reduction of puncturing). This enables the TG length to be tailored to a desired length, without having to increase output power more than necessary. In other embodiments of this invention, frames on an uplink control channel are formed or formatted so as to repeat format indicator (e.g., TFCI) bits therein in compressed mode. Optionally, format indicator bit(s) immediately or directly following the TG may be repeated later in the frame since these bits may sometimes suffer from slightly worse power control than other TFCI bits in the frame. Moreover, any embodiment of this invention is also applicable to downlink channel communications.